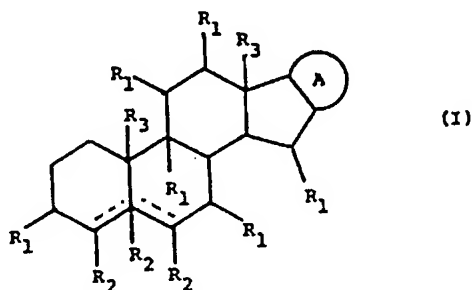


### IN THE CLAIMS

Please amend claims 25-27, 31-34, and 36 as follows:

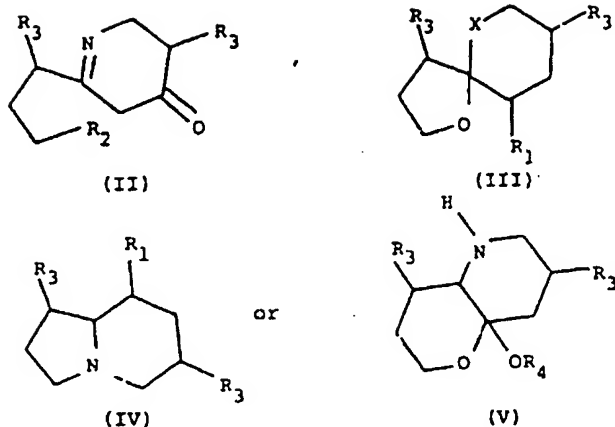
Please add new claims 38-53 as follows:

25. (Amended) A composition according to claim 1 comprising about 0.001% - 5% glycoalkaloids.
26. (Amended) A composition according to claim 1 comprising about 10% glycoalkaloids.
27. (Amended) A pharmaceutical composition comprising a composition of claim 1 and a pharmaceutically acceptable carrier.
31. (Amended) A method of treating cancer in a subject comprising the step of administering to the subject an effective amount of a composition comprising at least two glycoalkaloids of formula I:



wherein: either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V):



each of R<sup>1</sup> is a radical separately selected from the group consisting of hydrogen, amino, oxo and OR<sup>4</sup>;

each of R<sup>2</sup> is a radical separately selected from the group consisting of hydrogen, amino and OR<sup>4</sup>;

each of R<sup>3</sup> is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative;

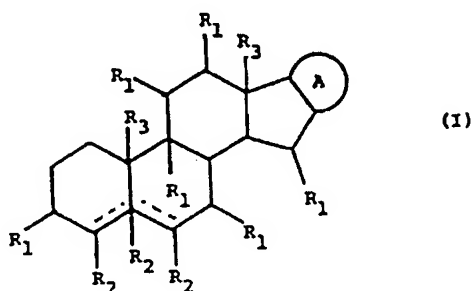
“X” is a radical selected from the group comprising –CH<sub>2</sub>–, –O– and –NH<sub>2</sub>–; and

wherein the compound includes at least one R<sup>4</sup> group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoses), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of CH<sub>2</sub>OH), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates;

wherein the ratio of said glycoalkaloids is between 6:1 and 1:6 and on the proviso that when the glycoalkaloids are solamargine and solasonine and they are present in a 1:1

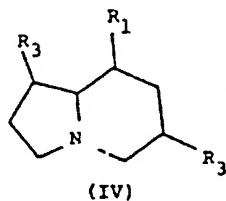
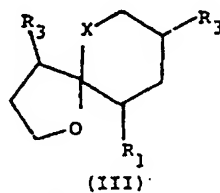
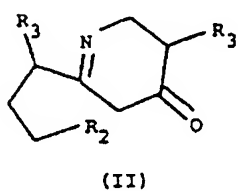
ratio the solamargine and solasonine are isolated, or a pharmaceutical composition of claim 27.

32 (Amended) A method of treating psoriasis in a subject comprising the step of administering to the subject an effective amount of a composition comprising at least two glycoalkaloids of formula I:

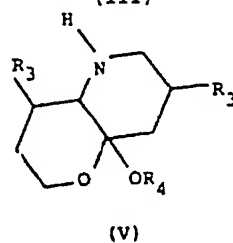


wherein: either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V):



or



each of  $R^1$  is a radical separately selected from the group consisting of hydrogen, amino, oxo and  $OR^4$ ;

each of  $R^2$  is a radical separately selected from the group consisting of hydrogen, amino and  $OR^4$ ;

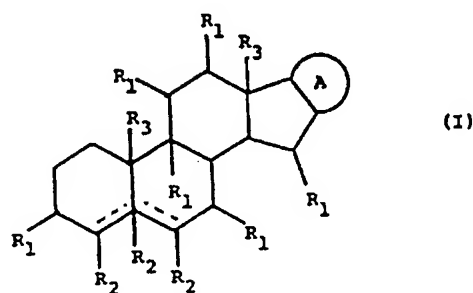
each of  $R^3$  is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative;

“X” is a radical selected from the group comprising  $-CH_2-$ ,  $-O-$  and  $-NH_2-$ ; and

wherein the compound includes at least one  $R^4$  group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoses), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of  $CH_2OH$ ), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates;

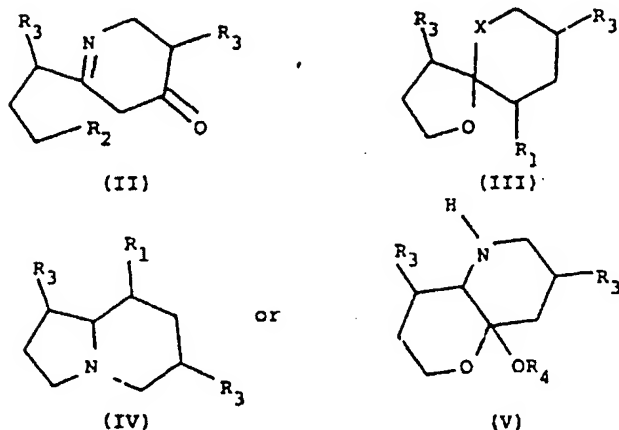
wherein the ratio of said glycoalkaloids is between 6:1 and 1:6 and on the proviso that when the glycoalkaloids are solamargine and solasonine and they are present in a 1:1 ratio the solamargine and solasonine are isolated, or pharmaceutical composition of claim 27.

33. (Amended) A method of treating or abnormal cell growth in a patient comprising the step of administering an effective amount of a composition comprising at least two glycoalkaloids of formula I:



wherein: either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V):



each of R<sup>1</sup> is a radical separately selected from the group consisting of hydrogen, amino, oxo and OR<sup>4</sup>;

each of R<sup>2</sup> is a radical separately selected from the group consisting of hydrogen, amino and OR<sup>4</sup>;

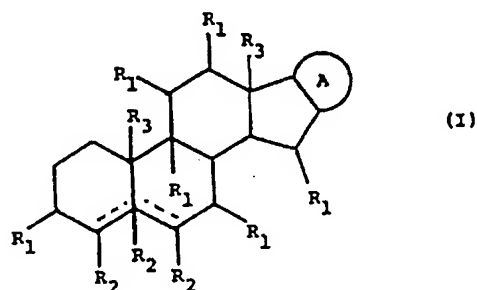
each of R<sup>3</sup> is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative;

“X” is a radical selected from the group comprising –CH<sub>2</sub>–, –O– and –NH<sub>2</sub>–; and

wherein the compound includes at least one R<sup>4</sup> group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoses), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of CH<sub>2</sub>OH), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates;

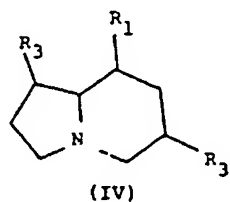
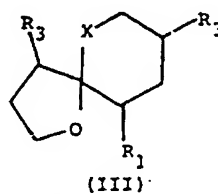
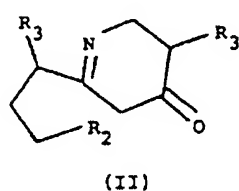
wherein the ratio of said glycoalkaloids is between 6:1 and 1:6 and on the proviso that when the glycoalkaloids are solamargine and solasonine and they are present in a 1:1 ratio the solamargine and solasonine are isolated, or pharmaceutical composition of claim 27 to the patient.

34. (Amended) A method of diagnosing abnormal cell growth in a subject comprising the step of applying a composition comprising at least two glycoalkaloids of formula I:

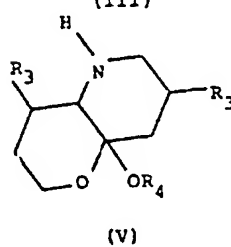


wherein: either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V):



or



each of  $R^1$  is a radical separately selected from the group consisting of hydrogen, amino, oxo and  $OR^4$ ;

each of  $R^2$  is a radical separately selected from the group consisting of hydrogen, amino and  $OR^4$ ;

each of R<sup>3</sup> is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative;

“X” is a radical selected from the group comprising –CH<sub>2</sub>-, -O- and –NH<sub>2</sub>-; and

wherein the compound includes at least one R<sup>4</sup> group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoses), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of CH<sub>2</sub>OH), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates;

wherein the ratio of said glycoalkaloids is between 6:1 and 1:6 and on the proviso that when the glycoalkaloids are solamargine and solasonine and they are present in a 1:1 ratio the solamargine and solasonine are isolated, or pharmaceutical composition of claim 27 to a test area on said subject and then monitoring said test area for inflammation.

36. (Amended) A composition of claim 1 further comprising a detectable label.

38. (New) A composition according to claim 6 comprising about 0.001% - 5% glycoalkaloids.

39. (New) A composition according to claim 17 comprising about 0.001% - 5% glycoalkaloids.

40. (New) A composition according to claim 6 comprising about 10% glycoalkaloids.

41. (New) A composition according to claim 17 comprising about 10% glycoalkaloids.

42. (New) A pharmaceutical composition comprising a composition of claim 6 and a pharmaceutically acceptable carrier.

43. (New) A pharmaceutical composition comprising a composition of claim 17 and a pharmaceutically acceptable carrier.

44. (New) A method of treating cancer in a subject comprising the step of administering to the subject an effective amount of a composition comprising at least two glycoalkaloids of formula I wherein:

either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V);

each of  $R^1$  is a radical separately selected from the group consisting of hydrogen, amino, oxo and  $OR^4$ ; each of  $R^2$  is a radical separately selected from the group consisting of hydrogen, amino and  $OR^4$ ; each of  $R^3$  is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative; "X" is a radical selected from the group comprising  $-CH_2-$ ,  $-O-$  and  $-NH_2-$ ; and

wherein the compound includes at least one  $R^4$  group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoses), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of  $CH_2OH$ ), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates; and

on the proviso that when the glycoalkaloids are solasonine and solamargine they do not constitute 66% of glycosides in the composition, or a pharmaceutical composition of claim 27.

45. (New) A method of treating cancer in a subject comprising the step of administering to the subject an effective amount of a composition consisting essentially of at least two glycoalkaloids of formula I wherein:

either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V); each of  $R^1$  is a radical separately selected from the group consisting of hydrogen, amino, oxo and  $OR^4$ ; each of  $R^2$  is a radical separately selected from the group consisting of hydrogen, amino and  $OR^4$ ; each of  $R^3$  is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative; "X" is a radical selected from the group comprising  $-CH_2-$ ,  $-O-$  and  $-NH_2-$ ; and

wherein the compound includes at least one  $R^4$  group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinose), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of  $CH_2OH$ ), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates, or a pharmaceutical composition of claim 27.

46. (New) A method of treating psoriasis in a subject comprising the step of administering to the subject an effective amount of a composition comprising at least two glycoalkaloids of formula I wherein:

either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V);

each of  $R^1$  is a radical separately selected from the group consisting of hydrogen, amino, oxo and  $OR^4$ ; each of  $R^2$  is a radical separately selected from the group consisting of hydrogen, amino and  $OR^4$ ; each of  $R^3$  is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative; "X" is a radical selected from the group comprising  $-CH_2-$ ,  $-O-$  and  $-NH_2-$ ; and

wherein the compound includes at least one  $R^4$  group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoses), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of  $CH_2OH$ ), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates; and

on the proviso that when the glycoalkaloids are solasonine and solamargine they do not constitute 66% of glycosides in the composition, or pharmaceutical composition of claim 27.

47. (New) A method of treating psoriasis in a subject comprising the step of administering to the subject an effective amount of a composition consisting essentially of at least two glycoalkaloids of formula I wherein:

either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V); each of  $R^1$  is a radical separately selected from the group consisting of hydrogen, amino, oxo and  $OR^4$ ; each of  $R^2$  is a radical separately selected from the group consisting of hydrogen, amino and  $OR^4$ ; each of  $R^3$  is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative; "X" is a radical selected from the group comprising  $-CH_2-$ ,  $-O-$  and  $-NH_2-$ ; and

wherein the compound includes at least one R<sup>4</sup> group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoise), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of CH<sub>2</sub>OH), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates, or pharmaceutical composition of claim 27.

48. (New) A method of treating or abnormal cell growth in a patient comprising the step of administering an effective amount of a composition comprising at least two glycoalkaloids of formula I wherein:

either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V);

each of R<sup>1</sup> is a radical separately selected from the group consisting of hydrogen, amino, oxo and OR<sup>4</sup>; each of R<sup>2</sup> is a radical separately selected from the group consisting of hydrogen, amino and OR<sup>4</sup>; each of R<sup>3</sup> is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative; "X" is a radical selected from the group comprising -CH<sub>2</sub>-, -O- and -NH<sub>2</sub>-; and

wherein the compound includes at least one R<sup>4</sup> group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoise), compounds wherein the aldehyde, ketone or

hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of CH<sub>2</sub>OH), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates; and

on the proviso that when the glycoalkaloids are solasonine and solamargine they do not constitute 66% of glycosides in the composition, or pharmaceutical composition of claim 27 to the patient.

49. (New) A method of treating or abnormal cell growth in a patient comprising the step of administering an effective amount of a composition consisting essentially of at least two glycoalkaloids of formula I wherein:

either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V); each of R<sup>1</sup> is a radical separately selected from the group consisting of hydrogen, amino, oxo and OR<sup>4</sup>; each of R<sup>2</sup> is a radical separately selected from the group consisting of hydrogen, amino and OR<sup>4</sup>; each of R<sup>3</sup> is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative; "X" is a radical selected from the group comprising -CH<sub>2</sub>-, -O- and -NH<sub>2</sub>-; and

wherein the compound includes at least one R<sup>4</sup> group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinose), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of CH<sub>2</sub>OH), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates, or pharmaceutical composition of claim 27 to the patient.

50. (New) A method of diagnosing abnormal cell growth in a subject comprising the step of applying a composition comprising at least two glycoalkaloids of formula I wherein:

either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V);

each of  $R^1$  is a radical separately selected from the group consisting of hydrogen, amino, oxo and  $OR^4$ ; each of  $R^2$  is a radical separately selected from the group consisting of hydrogen, amino and  $OR^4$ ; each of  $R^3$  is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative; "X" is a radical selected from the group comprising  $-CH_2-$ ,  $-O-$  and  $-NH_2-$ ; and

wherein the compound includes at least one  $R^4$  group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinoses), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of  $CH_2OH$ ), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates; and

on the proviso that when the glycoalkaloids are solasonine and solamargine they do not constitute 66% of glycosides in the composition, or pharmaceutical composition of claim 27 to a test area on said subject and then monitoring said test area for inflammation.

51. (New) A method of diagnosing abnormal cell growth in a subject comprising the step of applying a composition consisting essentially of at least two glycoalkaloids of formula I wherein:

either one or both of the dotted lines represents a double bond, and the other a single bond, or both represent single bonds;

A: represents a radical selected from the following radicals of general formulae (II) to (V); each of  $R^1$  is a radical separately selected from the group consisting of hydrogen, amino, oxo and  $OR^4$ ; each of  $R^2$  is a radical separately selected from the group consisting of hydrogen, amino and  $OR^4$ ; each of  $R^3$  is a radical separately selected from the group consisting of hydrogen, carbohydrate and a carbohydrate derivative; "X" is a radical selected from the group comprising  $-CH_2-$ ,  $-O-$  and  $-NH_2-$ ; and

wherein the compound includes at least one  $R^4$  group that is a carbohydrate or a derivative thereof selected from the group comprising glyceric aldehyde, glycerose, erythrose, threose, ribose, arabinose, xylose, lyxose, altrose, allose, gulose, mannose, glucose, idose, galactose, talose, rhamnose, dihydroxyactone, erythrulose, ribulose, xylulose, psicose, fructose, sorbose, tagatose, and other hexoses, heptoses, octoses, nanoses, decoses, deoxysugars with branched chains, (e.g. apiose, hamamelose, streptose, cordycepose, mycarose and cladinose), compounds wherein the aldehyde, ketone or hydroxyl groups have been substituted (e.g. N-acetyl, acetyl, methyl, replacement of  $CH_2OH$ ), sugar alcohols, sugar acids, benzimidazoles, the enol salts of the carbohydrates, saccharinic acids, sugar phosphates, or pharmaceutical composition of claim 27 to a test area on said subject and then monitoring said test area for inflammation.

52. (New) A composition of claim 6 further comprising a detectable label.

53. (New) A composition of claim 17 further comprising a detectable label